

SECTION 02503 - STANDARDS OF UTILITY CONSTRUCTION

PART 1 - GENERAL

1.1 MINIMUM STANDARDS FOR SANITARY SEWERS

- A. Wherever possible, sanitary sewer systems along streets shall be located on the opposite side of the street from water mains. Sanitary sewers shall be placed a minimum of 18" vertical distance and 10' horizontal distance from all water and storm sewers.
- B. As the sanitary sewer system is installed, sewer laterals shall be marked with a 3" green PVC pipe or other acceptable stake, painted green, with a height allowing a minimum of 6'-0" above grade. Stake shall have the uppermost section painted green and marked with the letters "SS" to indicate sewer line placement.
- C. During the placement of new concrete curb, utility marking shall be embossed into the top of the curb. The marking shall be 2" high letters and be "SS" for a sanitary sewer lateral and "MH" for a sanitary manhole. The stamp shall be placed into the concrete before the concrete sets up. The letters shall be located perpendicular from the utility feature that is being marked. Any stamp that is missed during installation of curb must be sandblasted in to the curb.
- D. All Street castings must be black asphalt dipped.
- E. Do not backfill trenches and excavations until all sanitary sewers have been inspected by the Utility or designee and piping systems are installed in accordance with the requirements of the specifications and the drawings.
- F. All utilities, including but not limited to gas, electric, and cable, shall be installed a minimum of 3' from all manholes.

1.2 MINIMUM STANDARDS FOR WATERMAINS

- A. Water main supply system for subdivisions and industrial/business parks shall be "looped" to allow for both a primary and secondary water supply to the site.
- B. Wherever possible, water main systems along streets shall be located on the opposite side of the street from sanitary sewer lines. Water mains shall

be placed a minimum of 18" vertical distance and 10' horizontal distance from all sanitary and storm sewers.

- C. Lateral connections should be installed in conjunction with installation of water mains. The water main system shall be designed to wrap around not less than 75% of the outside turning circle of the cul-de-sac.
- D. As the water main system is installed, water laterals shall be marked with a 3" blue PVC pipe or other acceptable stake, painted blue, with a height allowing a minimum of 6'-0" above grade. Stake shall have the uppermost section painted blue, and marked with the letter "W" to indicate water line placement.
- E. Do not backfill trenches and excavations until all water lines have been inspected by the Utility or designee and piping systems are installed in accordance with the requirements of the specifications and the drawings.
- F. During the placement of new concrete curb, utility marking shall be embossed into the top of the curb. The marking shall be 2" high letters and be "W" for a water meter and "V" for a water valve. The stamp shall be placed into the concrete before the concrete sets up. The letters shall be located perpendicular from the utility feature that is being marked. Any stamp that is missed during installation of curb must be sandblasted in to the curb.
- G. All utilities, including but not limited to gas, electric, and cable, shall be installed a minimum of 3' from all water laterals.

1.3 MINIMUM STANDARDS FOR STORM SEWERS

- A. As the storm sewer system is installed, subsurface drain laterals shall be marked with a fence post or other acceptable stake, with a height allowing a minimum of 6'-0" above grade. Stake shall have the uppermost section painted pink, and marked with the letters "D" to indicate subsurface drain line placement.
- B. Storm sewers shall be placed a minimum of 18" vertical distance and 10' horizontal distance from all water and sanitary sewers.
- C. Do not backfill trenches and excavations until all storm lines have been inspected by the WPWD or designee in accordance with the requirements of the specifications and the drawings.
- D. During the placement of new concrete curb, utility marking shall be embossed into the top of the curb. The marking shall be a 2" high letter

and be a "D" for a subsurface drain. The stamp shall be placed into the concrete before the concrete sets up. The letters shall be located perpendicular to the utility feature that is being marked. Any stamp that is missed during installation of curb must be sandblasted in to the curb.

- E. All Street castings must be black asphalt dipped.
- F. All utilities, including but not limited to gas, electric, and cable, shall be installed a minimum of 3' from all manholes.
- G. Utility pedestals shall not be placed on top of storm sewer lines.

PART 2 - PRODUCT

Not Applicable

PART 3 - EXECUTION

Not Applicable

END OF SECTION 02503